

REMARKS

Claims 1, 3, 4, 7, 11, 13, 20, and 23 are pending in the above-identified application. Of these, Claim 13 has been canceled, Claims 1, 3, 4, and 11 have been amended, and no claims have been added, leaving Claims 1, 3, 4, 7, 11, 20, and 23 for consideration upon entry of this amendment.

Amendments to Claims

Claim 1 has been amended to clarify the following:

1.) that the core (B) comprises

(i) 55.0 to 97.5 parts by weight of a continuous acryl rubber core placed on the acryl seed latex of (A)

(ii) 2.5 to 45.0 parts by weight of a discrete silicone rubber core placed into and onto the continuous acryl rubber core (i) (see Specification at least on p. 7, lines 7-9 and p. 8, lines 9-12);

2.) that the graft shell (C) is placed on the continuous acryl rubber core of (B)(i) having the discrete silicone rubber core of (B)(ii) therein, and the discrete silicone rubber core of (B)(ii) placed onto the continuous acryl rubber core of (B)(i);

3.) that the discrete silicone rubber core of (B)(ii) is prepared by swelling a cyclic organosiloxane precursor into the continuous acryl rubber core;

4.) to remove the limitations "having a Latex InterPenetrating Network (LIPN) morphology in which a discrete polyorganosiloxane rubber phase is dispersed locally onto an inner part and surface of the continuous acryl rubber core;"

5.) to specify that the core has a glass transition temperature of -120°C to 25°C, support for which can be found in the Specification at least on p. 8, lines 7-8; and

6.) to remove the term "aiding monomer" and to recite instead the limitations of Claim 13, canceled herewith, to recite that the shell includes "one or more compounds selected from the group consisting of methyl acrylate, ethyl acrylate, butyl acrylate, acrylonitrile, and methacrylonitrile", support for which can be found in the Specification at least on p. 8, lines 1-6.

The limitations of the core composition and the glass transition temperature by swelling and condensing reaction is further supported by Examples 1, 6 to 9 of the instant Specification.

Claims 3 and 4 has been amended to replace the term “acrylic” with “acryl” to provide antecedent basis to Claim 1.

Claim 11 has been amended to remove “(B)(i)”.

Reconsideration and allowance of the claims are respectfully requested in view of the above amendments and the following remarks.

Claim Rejections Under 35 U.S.C. § 112, First Paragraph

Claims 1, 3, 4, 7, 11, 13, 20, and 23 stand rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the Specification in such a way as to reasonably convey to one skilled in relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. Applicants respectfully traverse this rejection.

Specifically, Claim 1 is rejected for failing to comply with the written description requirement for reciting (A) a seed latex, (B1) a continuous acryl rubber core, and (B2) an acryl-silicone rubber core, whereas it is stated in the Office Action dated October 27, 2010 on p. 3 that the original disclosure does not support an impact modifier having a first acryl rubber core and a second acryl silicone rubber.

Satisfaction of the description requirement under 35 U.S.C. § 112, first paragraph ensures that claims presented subsequent to the filing date of the application was sufficiently disclosed at the time of filing, so that the prima facie date of invention can fairly be held to be the filing date of the application. *See, Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 1562, 19 U.S.P.Q.2d 1111, 1115 (Fed. Cir. 1991). In order to determine whether an application meets the “written description” requirement with respect to later-filed claims, the application need not describe the claimed subject matter in exactly the same terms as used in the claims. *In re Lukach*, 442 F.2d 967, 969, 169 U.S.P.Q. 795 (C.C.P.A. 1971). It must simply indicate to those of ordinary skill in the art that as of the filing date the applicant had invented what is now claimed. *Id.*, at 1563, 19 U.S.P.Q.2d at 1116; *see In re Wertheim*, 541 F.2d 257, 191 U.S.P.Q. 90, (C.C.P.A. 1976).

In particular, if a structure or process not explicitly described, it may still meet the description requirement if the concept of what is claimed is “inherent” in what is described. It is well-established that what is conventional or well known to one of ordinary skill in the art need not be disclosed in detail. *See Hybritech Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d at 1384, 231 USPQ at 94. If a skilled artisan would have understood the inventor to be in possession of the claimed invention at the time of filing, even if every nuance of the claims is not explicitly

described in the specification, then the adequate description requirement is met. See, e.g., *Vas-Cath Inc. v. Mahurkar*, 935 F.2d at 1563, 19 USPQ2D at 1116; *Martin v. Johnson*, 454 F.2d 746, 751, 172 USPQ 391, 395 (CCPA 1972) (stating “the description need not be in *ipsis verbis* [i.e., “in the same words”] to be sufficient”).

Claim 1, as amended, clarifies, based on the description in the Specification on p. 8, lines 9-12 (see also p. 8, line 23 to p. 9, line 20) that the core is two discrete phases (i.e., two cores as stated in the cited portions of the Specification) – an acryl rubber core and a polyorganosiloxane (i.e., silicone) rubber core placed into and onto (i.e., “dispersed locally onto the inner part and surface of”) the acryl rubber core; and thus, the silicone rubber core interpenetrates with the acryl rubber core. Furthermore, the silicone rubber core is formed by swelling the acryl rubber core and organosiloxane component claimed in Claim 1, and condensing it to effect the interpenetration, as supported in the Specification on p. 9, lines 6-20. One skilled in the art will appreciate that though not written *ipsis verbis*, Claim 1 as amended to state that the discrete silicone rubber core is placed into and onto the acryl rubber core fully meets the support found in the cited portions of the Specification, and the skilled artisan would thus appreciate that support for Claim 1 as amended is present in the original Specification, and should therefore meet the written description requirements. Claims 3, 4, 11, 20, and 23 depend from Claim 1, and for the above reasons these claims should also now meet the written description requirement.

Claims 1, 3, 4, 11, 20, and 23 are further rejected as not being enabled as to the generic term “aiding monomer.” Claim 1 has accordingly been amended to remove this generic term, and to include specific support from the Specification (p. 8, lines 1-6), for the monomers methyl acrylate, ethyl acrylate, butyl acrylate, or (meth)acrylonitrile for the shell as noted by the Examiner. Claim 1, as amended, should therefore now meet the enablement requirement. As Claims 3, 4, 11, 20, and 23 depend from Claim 1, these claims should also now meet the enablement requirement.

Therefore, in view of the amendments, Claim 1 and its dependents should now meet the written description and enablement requirements, and should be acceptable to the Examiner. Reconsideration and withdrawal of these rejections under 112, first paragraph, and allowance of the claims, are respectfully requested.

Claim Rejections Under 35 U.S.C. § 112, Second Paragraph

Claims 1, 3, 4, 7, 11, 13, 20, and 23 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 has been rejected as indefinite for including the term “aiding monomer” which the Examiner has indicated is not supported by the Specification. As noted above, Claim 1 has been amended to replace the term “aiding monomer” with the monomers methyl acrylate, ethyl acrylate, butyl acrylate, or (meth)acrylonitrile as supported in the Specification (p. 8, lines 1-6). Claim 1, so amended, should now be acceptable to the Examiner.

Claim 1 is also rejected as indefinite where the Examiner notes the structure of the core is unclear. Applicants respectfully disagree, based on the above amendments to Claim 1, and submit that the proper standard for determining indefiniteness is whether one of ordinary skill in the art would understand what is claimed when the claim is read in light of the specification. *Seattle Box Co. v. Industrial Crating and Packing, Inc.*, 731 F.2d 818, 826, 221 U.S.P.Q. 568, 573-74 (Fed. Cir. 1984).

Claim 1, as amended and as noted above, clarifies, based on the description in the Specification on p. 8, lines 9-12 (see also p. 8, line 23 to p. 9, line 20) that the core is two discrete phases (i.e., two cores as stated in the cited portions of the Specification) – an acryl rubber core and a polyorganosiloxane (i.e., silicone) rubber core placed into and onto (i.e., “dispersed locally onto the inner part and surface of”) the acryl rubber core; thus, the silicone rubber core interpenetrates with the acryl rubber core. Furthermore, the silicone rubber core is formed by swelling the acryl rubber core and organosiloxane component claimed in Claim 1, and condensing to effect the interpenetration, as supported in the Specification on p. 9, lines 6-20.

One skilled in the art will appreciate that a limited range of structures would be obtained where a core is prepared from a continuous acryl rubber core and an organosiloxane precursor, organosiloxane cross-linking agent, and an organosiloxane graft linking agent, swelled, and condensed to form the discrete silicone rubber core as claimed in Claim 1 (as further emphasized in the Specification on p. 9, lines 15-20). Here, “discrete” refers to the distinct phases of the core of continuous acryl rubber and silicone rubber, and based on the nature of forming the core, the skilled artisan will appreciate that swelling the core and condensing silicone precursors in the manner claimed in Claim 1 to form the discrete silicone core is not vague or indefinite because this process is adequately described in the Specification and in the Examples. Thus, the discrete silicone rubber core is placed into and onto the acryl rubber core is unambiguously claimed

based on the support found in the cited portions of the Specification, and Claim 1 is therefore not indefinite. Claims 3, 4, 11, 20, and 23 depend from Claim 1, and for the above reasons these claims are also not indefinite.

Claim 1 is further rejected as indefinite for reciting the limitation “the acryl-silicone hybrid rubber core” and states there is insufficient antecedent basis for this limitation. Applicants have accordingly removed this term, and have simplified the language of Claim 1 to recite that core (B) includes the continuous acryl rubber core (i) and the discrete silicone rubber core (ii).

Claims 3 and 4 are both rejected as indefinite for reciting “the acrylic seed latex” where the Examiner states there is insufficient antecedent basis for this term. Applicants have accordingly amended this term to recite “the acryl seed latex” as recited in Claim 1.

For at least the above reasons, Claim 1 as amended, and its dependent Claims 3, 4, 7, 11, 20, and 23, are not indefinite and should now be acceptable to the Examiner. Reconsideration and withdrawal of the rejections under 112, second paragraph, and allowance of these claims, are respectfully requested.

Conclusion

It is believed that the foregoing amendments and remarks fully comply with the Office Action and that the claims herein should now be allowable to Applicants. Accordingly, reconsideration and allowance are requested.

If there are any additional charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 06-1130.

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